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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,198	10/30/2003	Tim K. Trudeau	ITDE-PNV113	2213
23122	7590	03/12/2007	EXAMINER	
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SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/697,198

Applicant(s)

TRUDEAU, TIM K.

Examiner

Bernard Krasnic

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The amendment filed 1/16/2007 have been entered and made of record.

2. In response to the amendments filed on 1/16/2007:

The "Objections to the specification" have been entered and therefore the Examiner withdraws the objections to the specification. However, due to the amendment, the Abstract arises with a new objection issue.

The "Objections to the claims" have been entered and therefore the Examiner withdraws the objections to the claims.

The "Claim rejections under 35 U.S.C. 112, second paragraph" have been entered and therefore the Examiner withdraws the rejections under 35 U.S.C. 112, second paragraph. However, due to the amendment, claims 12-19 and 21 arise with a different 35 U.S.C. 112 issue.

3. Applicant's arguments with respect to claims 12 and 21 have been considered but are moot in view of the new ground(s) of rejection. The Applicant alleges, "Newly Added Claim 21: ..." in page 14, and states respectively that the support for the newly added claim 21 is "in the specification at page 6, lines 18-21". However, when referring to this section of the specification, the Examiner believes that the newly added claim 21 consists of new matter (new matter is a 35 U.S.C. 112, first paragraph rejection issue) not originally disclosed in the specification. The specification in page 6, lines 18-21

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discloses *"If the substitution count exceeds a threshold, then all pixel substitutions are suspended for one frame. This allows the unfiltered value of every pixel to be placed into a single video buffer, and breaks the cycle of persistent false positives."* This newly added claim 21 discloses *"displaying the same received frame, if the amount of pixels counted is greater than the threshold value"*, but the specification in page 6, lines 18-21 only discloses breaking the cycle if the substitution count exceeds a threshold, and this definitely does not correspond to *"displaying the same received frame"* if the count is greater than the threshold as claim 21 recites. The Examiner's conclusion that newly added claim 21 is new matter is also supported by the original drawings because the original drawings, Figs. 1-4, only show the features described in claim 1 where the display displays the filtered frame if the count is less than a threshold. Similarly, the features of the amended independent claim 12 are similar to the combined features of claim 1 and the newly added claim 21, and therefore the amended claim 12 is also consisting of new matter not originally disclosed in the specification.

4. Applicant's arguments filed 1/16/2007 have been fully considered but they are not persuasive.

The Applicant alleges, "As required by claim 1, if the count ..." in page 10, and states respectively for claim 1 that "if the count of the modified pixels is above a threshold, the method does not display the filtered frame but displays the received frame". However, the Examiner believes the Applicant seems to be reading limitations that are not present in claim 1. Claim 1 discloses "displaying the filtered frame of pixels,

if the amount of pixels counted is less than a threshold value" which does not correspond to the applicant's argument that considers displaying the received frame if the count of the modified pixels is above a threshold.

The Applicant alleges, "Applicant respectfully submit, however, that Judice does not ..." and "Furthermore, Judice does not disclose or suggest ..." in page 10, and states respectively that that Judice doesn't teach identifying pixels in a received frame having scintillation noise and doesn't teach modifying those pixels identified in a received frame having scintillation noise to create a modified or filtered frame.

However, Judice discloses eliminating objectional scintillation in the image by using the dither threshold to update the received frame (see Judice, page 1434, left side, paragraph "Two issues are addressed ...", lines 9-11, page 1434, right side, paragraph "The adaptive thresholding algorithms discussed ...", lines 8-15, page 1436, left side, paragraph "In Figure 4 we show three ...", lines 1-8, page 1437, right side, paragraph "Up until now our results have centered ...", lines 6-9).

The Applicant alleges, "Lastly, Judice does not have a step of displaying ..." in page 10, and states respectively that Judice does not teach displaying the filtered frame if the amount of pixels counted is less than a threshold value. However, Judice discloses displaying the filtered frame (see Judice, page 1435, right side, paragraph "As shown in Figure 3 when ...", lines 1-4, the updated frame is stored and displayed by the processor). Also, it would be obvious to one of ordinary skill in the art at the time the invention was made to display the updated / filtered frame if the count is less than a threshold value as silently specified in Judice's disclosure (see Judice, page 1436, left

side, paragraph "In Figure 4 we show three ...", lines 1-8, average 1 percent is the threshold for the number of updates allowed for an updated frame to be displayed). Therefore, claims 2-11 also maintain their non-patentable status.

The Applicant alleges, "Newly added claim 21 ..." in page 11, and states respectively "displaying the same received frame, if the amount of pixels counted is greater than the threshold value". However as discussed above, the Examiner has determined that this newly added claim consists of new matter and therefore is rejected under 35 U.S.C. 112. The Applicant also alleges, "Independent claim 12 has been amended ..." in page 12, and states respectively "claim 12 includes features that are similar to the combined features of claims 1 and 21". However as discussed above, the Examiner has determined that this amended independent claim 12 consists of new matter and therefore is rejected under 35 U.S.C. 112. Therefore, claims 13-19 also maintain their non-patentable status.

The Applicant alleges, "Claim 8 recites ..." in pages 11-12, and states respectively states that the counting step directly impacts the modification recited in step c. However, the Examiner still believes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the aforementioned steps of claim 8 because of the fact that if the noise is too large (the counter is large), and larger than a specific threshold, then nothing should be modified and displayed since it will not be pleasant and recognizable to the human eye and also since it will create a large discrepancy error for further iterations.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, since the Examiner has discussed how the amended limitations of claim 12 and the amended claim 21 consist of new matter which is not shown by the feature of the drawings, these feature(s) should be canceled from the claim(s). No new matter should be entered.

Specification

6. The amendment filed 1/16/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "The method displays the received frame of pixels, if the amount of modified pixels counted in the filter frame of pixels is greater than the threshold value." in the amended abstract, lines 7-9 as discussed above.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 12-19 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re Claims 12 and 21 respectively: The limitation of displaying the received frame, if the amount of pixels counted is greater than the threshold value is considered to be new matter as discussed above.

Claims 13-19 are dependent upon claim 12.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 21, lines 2 and 4: The limitation "the same received frame" renders this claim indefinite because it is unclear if the same received frame is being considered to be the received frame or the filtered frame. It is suggested to be -- the received frame --.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judice. The art rejection in the Non-Final Office Action dated 11/14/2006 is incorporated by reference.

13. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judice in view of Lee et al. The art rejection in the Non-Final Office Action dated 11/14/2006 is incorporated by reference.

Allowable Subject Matter

14. Claim 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. Claim 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, set forth in this Office action.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 9:00am-3:00pm and every other Friday 9:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bernard Krasnic
March 2, 2007



SAMIR AHMED
PRIMARY EXAMINER